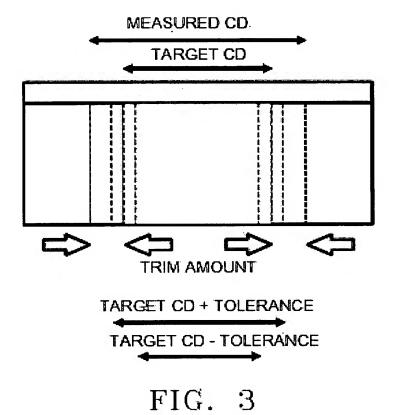


FIG. 2



TA DENOTES TRIM AMOUNT
TA-LB DENOTES TRIM AMOUNT LOWER BOUNDRY
TA-UB DENOTES TRIM AMOUNT UPPER BOUNDRY
CR DENOTES CONTROL RECIPE
NR DENOTES NOMINAL RECIPE

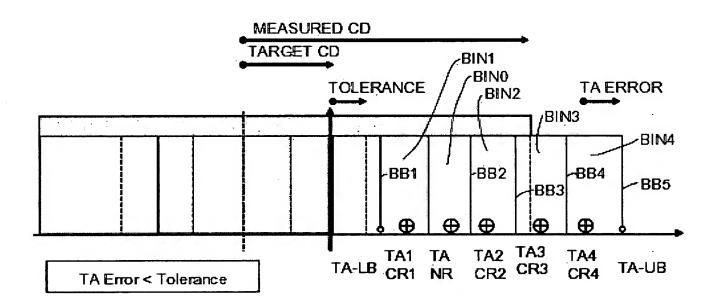


FIG. 4

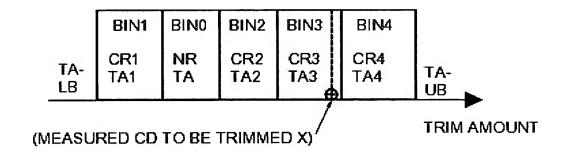


FIG. 5

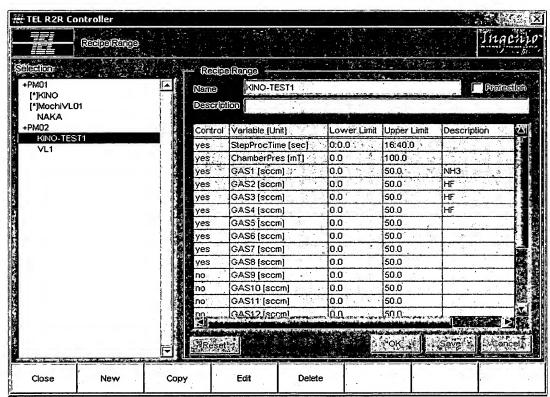


FIG. 6

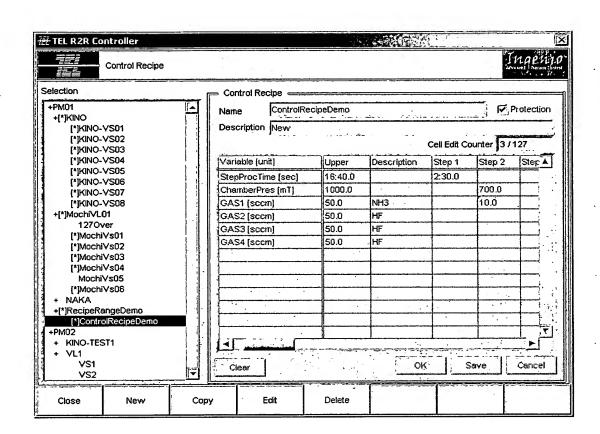


FIG. 7

₩ TEL R2R Controller								1
Control Strategy								Ingenio
Selection	Control Str	ategy						
+Telius1234	Name	Π					Enabled	Protection
+Standard +Simulation	Descriptio	nΓ		***************************************		<del></del>		
	System Re	cipe i			*			Select
	Transfer F		1. A.			te analogije sebala	et sometime of	_, Show
A 7	Module		ge Context Specific	cation		· · · · · · · · · · · · · · · · · · ·	• •	
		Lot	D(s)				•	
		H	D(8)			7		
		PJIC	)(s)	I e l'Albandania	Marie Palitane Palitane	enteriore established	and the state of t	
		Ças	ssette ID(s)		day 17 - 2 - 17 - 17 - 17 - 17 - 17 - 17 -		a. s. sasneup and	
		Car	rier 1D(s)					
		Slot	i(s)				Kanada Kanada Antara Antar	
		√Va	fer Type(s)					
		Scr	ibed Water ID(s)				disku lamina	
		Sub	ostrate ID(s)		Section 1		on the same is on the same	
		Wa	fer ID(\$)		وللم لحم الأحميد	عتاب بالأسمي		
		Sta	rt Time earier than					
		11 -	rt Time later than	Car is Commission in the		YYYY-MM-DD [	HH:MM[:SS]]	
		ll .	rologyDataFeilure	use t	ool process reci	pe (Nominal Rec	pe) -	
9.1		lf i	ectionFailure .		ool process reci	pe (Nominal Reci	pe) 🕶	ĺ
6 T A	1	Too	diPause on Failure	To a Laborator	PM Pa	Buse	<del></del>	ŀ
		<u> </u>	<del></del>			OK	Save	Cancel
Close New	Copy Edit	E)	Delete	Move	Test	[		1

FIG. 8

Control Pla					MV4 H 23   CV02412
alegion .					
+Telius1234	Name	ControlPlanDemo			Protection
+Standard KINO-TEST	Description	New			
KINO-TE5T2 Mochi-Test001 [*]Mochi-Test002	Integration	Control Algorithm			
[*]Mochi-Test003 Mochi-Test004	Integrat	ion with Process Tool			
[*]Mochi-Test05	System Reci	pe R2R-TEST			Select
+Simulation naka SimMochi-Test001 SimMochi-Test002	Nominal Red		TEST		
SimMochi-Test002	Nominal Red	tipe - 2nd	تول ورايرت عاصما ح		
SimMochi-Test004	Route IM	M1-PM01-LLM1			Show
Mochi-Test005 SimMochi-Test005					3
Mochi-Test006	IMM1 F	PMO1 LLM1		4.	
Mochi-Test007 Mochi-Test008		0 0 0		9 0	<u></u>
Mochi-Test009			4		
Mochi-Test010 Mochi-Test011					
Mochi-Test012			· · · · · · · · · · · · · · · · · · ·	<b>9</b> Q.	O .
Mochi-Test013					- Name and Address
			OK	Save	Cancel

FIG. 9A

TEL R2R Controller		
(Control Pla	n .	Ingen
election +Telius1234	ControlPlan ControlPlanDemo	o verden alle in le
+Standard KINO-TEST	Description New	Rolection
KINO-TEST2 Mochi-Test001 [*]Mochi-Test002	Integration Control Algorithm	
[*]Mochi-Test003 Mochi-Test004 [*]Mochi-Test05	Control CD: CD1 To Description	
+Simulation naka SimMochi-Test001	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
SimMochi-Test002 SimMochi-Test003	Control CD Calculated by: Step Average Measurement Step  Description	النيف
SimMochi-Test004 Mochi-Test005 SimMochi-Test005		
Mochi-Test006 Mochi-Test007	Target CD:  0.0 +  0.0 nm.	
Mochi-Test008 Mochi-Test009 Mochi-Test010	Action on Metrology Data Failure  use tool process recipe (Nominal Recipe)	<u> </u>
Mochi-Test011 Mochi-Test012 Mochi-Test013	Action on Variables Set Selection Failure use tool process recipe (Nominal Recipe)	
riodii 168010	OK Save	Cancel
In the state of th		

FIG. 9B

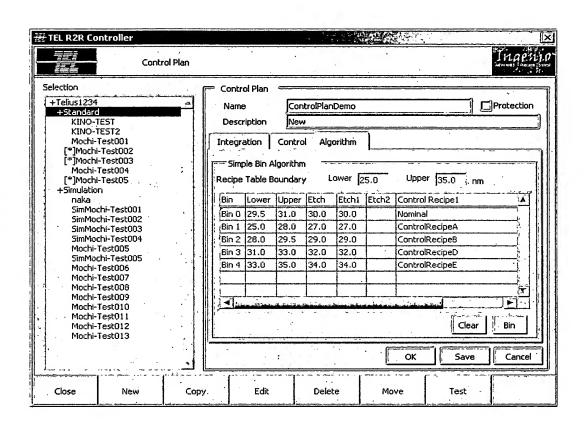


FIG. 9C

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Recipe Range	RecipeRang	eDemo _			Select			
Bin Table Boundary	Lower 25.0	Upp	per 35.0					
Control Recipe 1	(	Control Reci	pe 2		Etch 1	Etch 2	Etch	A
Vominal					30.0		30.0	7
ControlRecipeA					27.0		27.0	7
ControlRecipeB					29.0		29.0	7
ControlRecipeD					32.0		32.0	-
					34.0		34.0	7
ControlRecipeE					34.0		34.0	1
ControlRecipeE  Control Recipe will automat	tically be selec	ted by the in	nput etch a	mount)	34.0		34.0	र
	tically be selec	ted by the in	nput etch a	mount)	34.0		34.0	Ť
Control Recipe will automat			nput etch a	mount)	34.0		34.0	र
	Select			mount)	34.0		34.0	<u> </u>
Control Recipe will automat			nput etch a	mount)		Step 6		T A
Control Recipe will automat	Select	Delete				Step 6		
Control Recipe will automat  Control Recipe Viewer  Description	Select	Delete				Step 6		
Control Recipe will automat  Control Recipe Viewer  Description  StepProcTime [sec]	Select	Delete Step 2				Step 6		
Control Recipe will automat  Control Recipe Viewer  Description  StepProcTime [sec]  ChamberPres [mT]	Select	Step 2				Step 6		

FIG. 10

∰-T	EL R2R (	ontroller					- 300			Ţ.
		Control Statu	ıs						Inge	
Cont	rol Plan	Mochi-	Test002				Description Sa	me as Mochi-test00	01	
Syst	em Recip	e TEST-F	R2R-MOCHI							
Nom	inal Recip	e 1st COR/P	1/KINO-TES	T			- 2nd			
Targ	et CD	50	<u> </u>	20	nm					<del>,</del> ,
Tran	sfer Rou	te IMM1-P	M01-LLM1						1	
		IMM1	PM01	LLM1						
		<u>(P)</u>	<u> </u>	O	•	C* ×	0 0	C	<b>C</b>	
				-		$\overline{c}$			0	
= c	ontrol VV					<del></del>			<del></del>	
Мо	de Star	dard CJ	ID LP3Con	Run7/031	13084940		PJID LP:	3/PJ 1/021258-1/7		
-	4		1	1-		TEX. 1.0		IC-1-ID-12	100 a. 1	
	SlotNo		InitCD	Etch	Etch1	Etch2	Control Recipe1	Control Recipe2	Result	
1	1	TEL 3a.01	65.22	15	15	0	MochiVs01	ļ	SELECTED	
2	2	TEL 3a.02	69.94	20	20	0	Nominal	ļ	SELECTED	
3	3	TEL 3a.03	79.41	30	30	0	MochiVs03		SELECTED	
4	4	TEL 3a.04	84.43	30	30	0	MochiVs03		SELECTED	
5	5	TEL 3a.05	73.82	25	25	0	MochiVs02		SELECTED	
-	4	and the state of				والمراجع بأنا	THE RESERVE AND ADDRESS OF THE PARTY OF THE	A CONTRACTOR	- جيء يا انشنت	
										===

FIG. 11

## 14/20

			j.		7.				====
PM01:	Telius_COR	PM02:	Teliu	ıs_DRM					
Run ID:	20030702-0006-PM01-telatapoxs01	Run ID:		PM02-telatapons01					
DC:	DefaultPlanPM01	DC:	Default	PlanPM02	<b></b>  -			*	
	VIP: OES:		o del	710/29:041 VIP: OES: Error			•	ē	· .
LM1:	Telius_PHT	1			0.				
un ID:	20030702-0008-LLM1-telatapows01								
c:	DefaultPlanLLM1								
	VIP: OES:					- , ·	() ()		
MM1:	Telius_ODP	7		* ***	2			•	÷
Run ID:	20030702-0008-IMM1-telatapows01			:			: .		• .
DC:	DefaultPlanIMM1	].	· ·	•					
	VIP: OES:						Y		

FIG. 12

File Edit View Configure	***	Help 77
	ii e	<u>Ingenio</u>
Tool Name: [lelatapows01	PAddress: 172.23.23.75 Root Dire	ectory. EIAPCData
Module: PM01	Module: LLM1	Module: PM02
Type: Tellus_COR	Type: Telius_PHT	Type: Telius_DRM
Sensors Sensor Setpoints_Telius_COR_Etcher enabled Sensor: Maintenance_Counters_TEL_Etcher enabled Sensor: Maintenance Counters Sens	그 Tool: telatapcws01 금-^ Module: LLM1 ! DCP: DefaultLLM1 enabled recipe_id like %'	Sensors
E-C3 Strategy; Auto_SPC enabled recipe_id like PROD.%  1 - ● SPC: auto_template enabled Template SPC plan  1 - ● SPC: auto_template enabled Template SPC plan  200-07-02 22:17-43.421002 Software A connection was successfully estable 2003-07-02 22:163-04.00002 Software The Ingenio Loader encountered S 2003-07-02 21:43-01.000002 Software A connection was successfully estable	lished with the tool agent. OLSTATE 22007 while inserting data into the pecristent database.	L - ● Strategy, Auto_SPC disabled recipe_
Tool ID: telatapows01 Tool Connection: Connected	Screen:Module Configuration    User: service@Service D	peration   2003-07-04 07:08:00

FIG. 13

	lingen
Tool: telatapcws01	Data Collection Strategy Data Collection Plan Parameter Summary Step Trimming
⊕ Sensors ⊕	Plan Name: DefaultPlanLLM1   Lasted Used: 2003-03-24 19:09:3
	Description: auto-generated by Ingenio server
Strategy: Auto_SPC enabled	
-	Parameter
	Selected
	1 APC 2 N2_GAS_FLOW
	3 PRESSURE
Unassociated	4 STAGE_TEMP 5 STEP
	6 UPPER_TEMP 7 WALL_TEMP
The second secon	Being Edited By,
3-07-02 22:17:43.421002 Software A con-	ction was successfully established with the tool agent.

FIG. 14

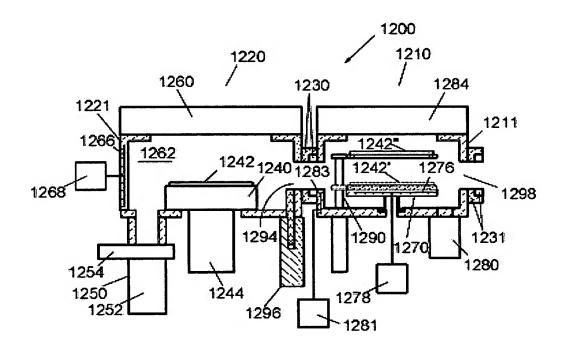


FIG. 15

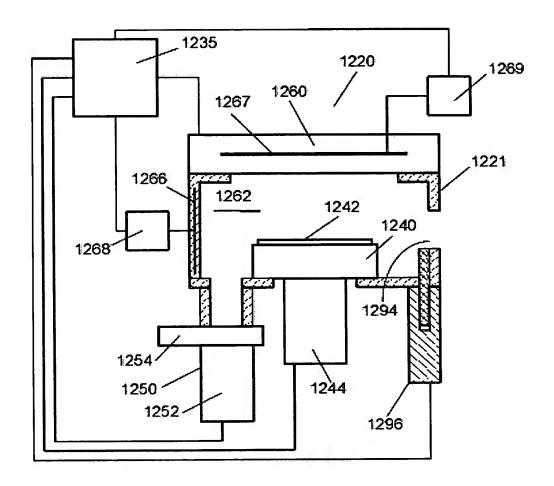


FIG. 16

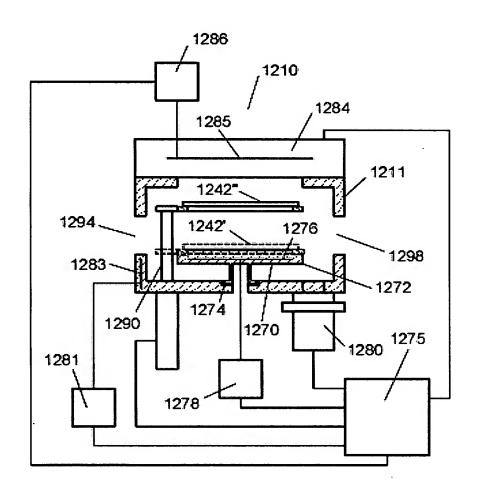


FIG. 17

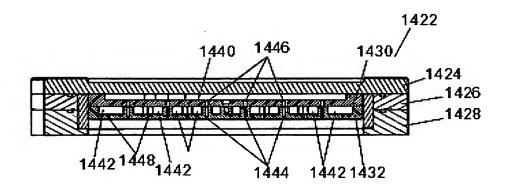


FIG. 18